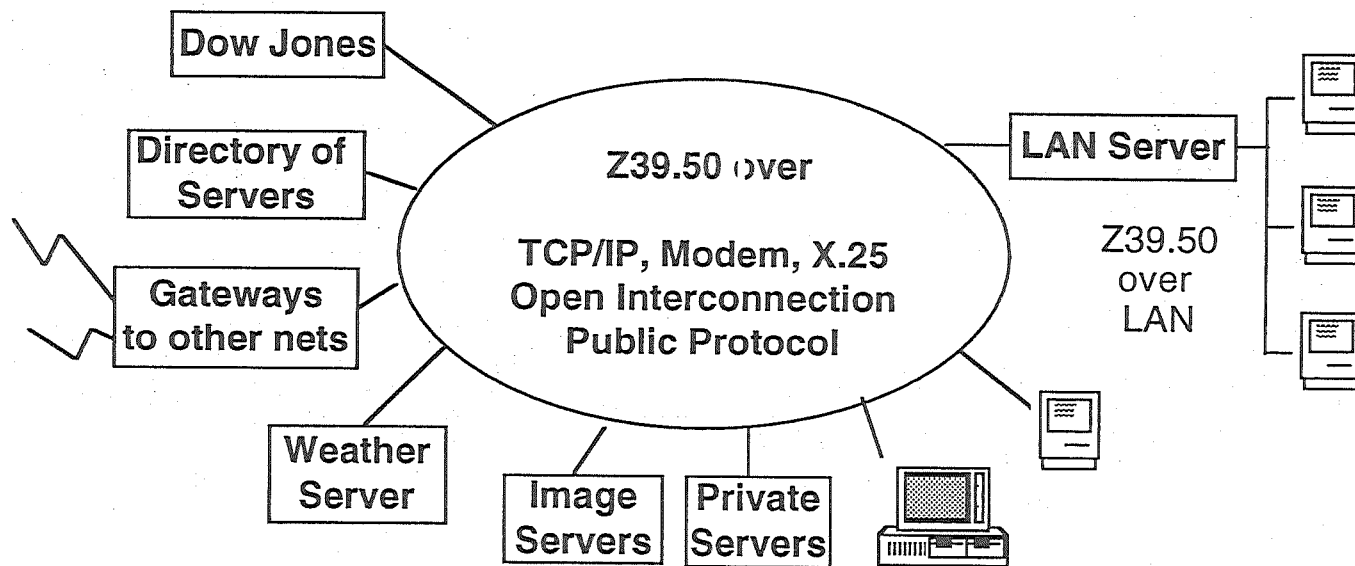


WAIS Inc: Network Publishing

- Founded June 1992 from 1990 Consortium of Apple / Thinking Machines / DowJones / KPMG
- Technology: 2 Founders from Supercomputing
- Internet: Experience in Building an Internet System
- Publishing: 2 Founders from Publishing

Wide Area Information Server Architecture



- Point-and-click interface to Worldwide Information
- Client -----> Protocol -----> Server

Internet Services: Navigating Global Information Space

Allows
Personal news
feeds

Allows Personal
browsing

Allows Finding
People

Allows Finding
Information

Allows
Automated
Gathering

Basic Services

- Remote computer use
- Transferring files
- Email

Mailing Lists and Bulletin Board Services

- Automated mailing lists
- News distribution

Interactive Information Delivery Services

- Gopher
- World Wide Web
- Mosaic

Directory Services

- WHOIS
- Netfind
- X.500
- Whois + + +

Indexing Services

- Archie
- Veronica
- WAIS
- Online library catalogues

Active Agents

- Knowbot

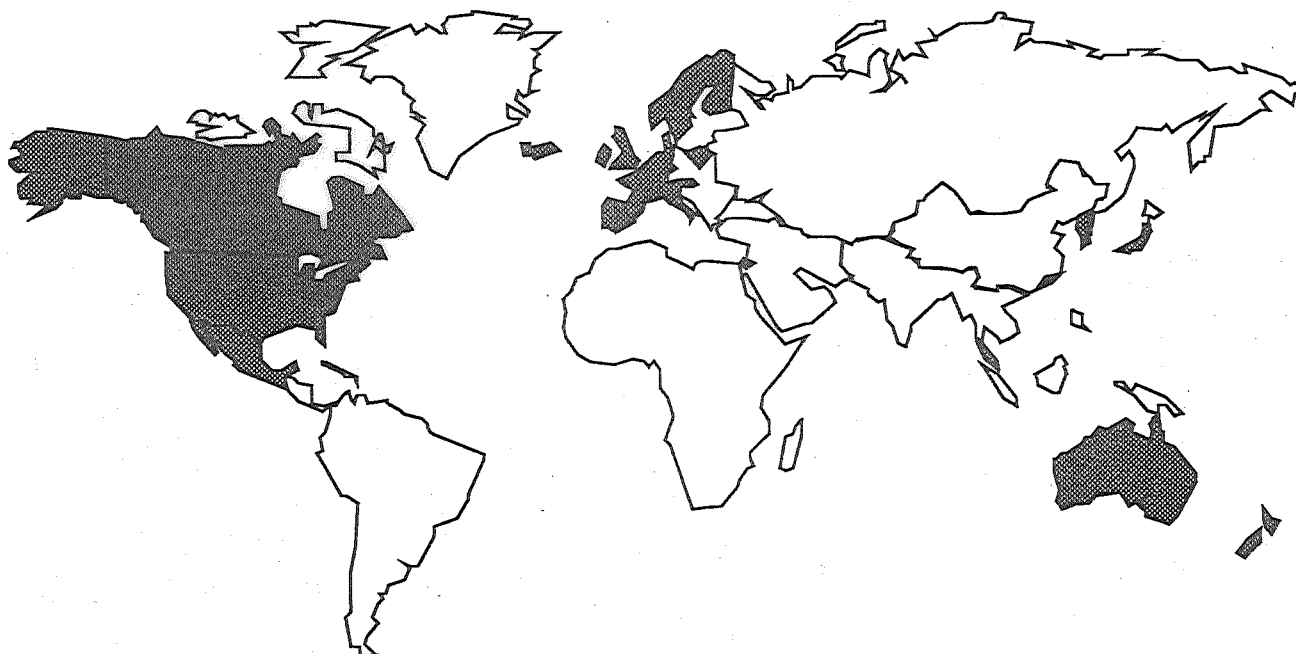
Network Management

- SNMP
- SNMP2

Internet Gopher

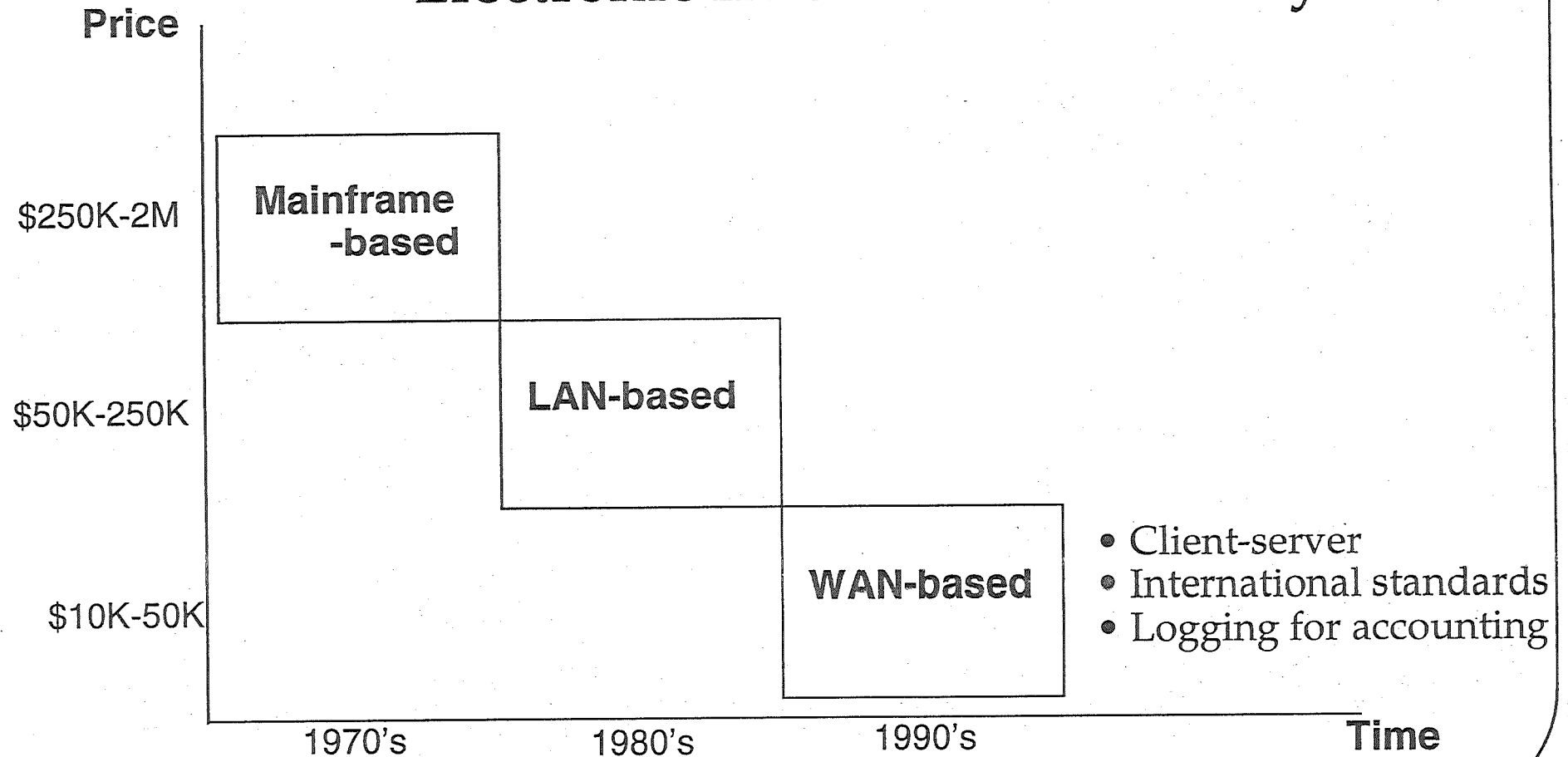
- Introduced in 1992 by University of Minn
- Thousands of Servers
- Top level gets 10,000 requests an hour
- Very popular with "Internet explorers"

WAIS on Internet



- Over 50,000 users on the Internet
- Users in 28 Countries:
Mexico, Singapore, Finland, Australia, ...
- 500 Databases served from 12 Countries:
Norway, Canada, UK, ...
New database every day.
- VT-100 Interface in California:
240 each day, 4,600 different machines

Electronic Information Delivery



March 1994

WAIS Navigation

- Optimized for Wide Area Networks
- Natural Language with Relevance Feedback
- Personal/Enterprise/Global Information
- Interactive Search → Agents

Network Publishing: Where Are We?

- Networks emerging from Government funding
- Information Services still in Government funding stage
- Yet to come: Games, Voice/Video, Museums, Malls

WAIS Inc Server

- Mixed Natural Language and Boolean
- Accounting for Billing
- Network Security
- Data in original formats
- Popular Unix Platforms



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coffee pot

URL: <http://www.eb.com/>



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- [Macropaedia 1994](#) -- Knowledge in Depth

toBoot

onto1

onto2

onto3

Partition

Director

voice

trash

What I Really Want

- My own information to be accessible to me
- Published information should find me
 - Fun to browse
 - Easy to dive into a particular point
- Usable Anywhere
- Help me share what I have learned

Overview of Talk

- Network publishing's brief status
- NetBook: An analogy of Internet Information Services
- WAIS Inc: a work in progress
- Some Upcoming WAIS Systems

1994 Plans

- **Server 2.0 Release: Integrate Browsing, DBMS, and Security**
- **Protocol Toolkit: Z39.50-v2, URL, (RSA or Kerberos), etc**
- **For-Pay Services on the Internet**

→ how is doing the security + cash pieces?

→ When is Mac Mosaic 2.0 due out?
(I am looking for terms)

June

WAIS Inc Products

WAIS Workstation for Unix

\$10k-40k

Novell
Appleshare

WAIS
Workstation

LAN and Internet

WAIS Server for Unix

\$15k-50k

DBMS

WAIS
Server

Internet

Dial-up

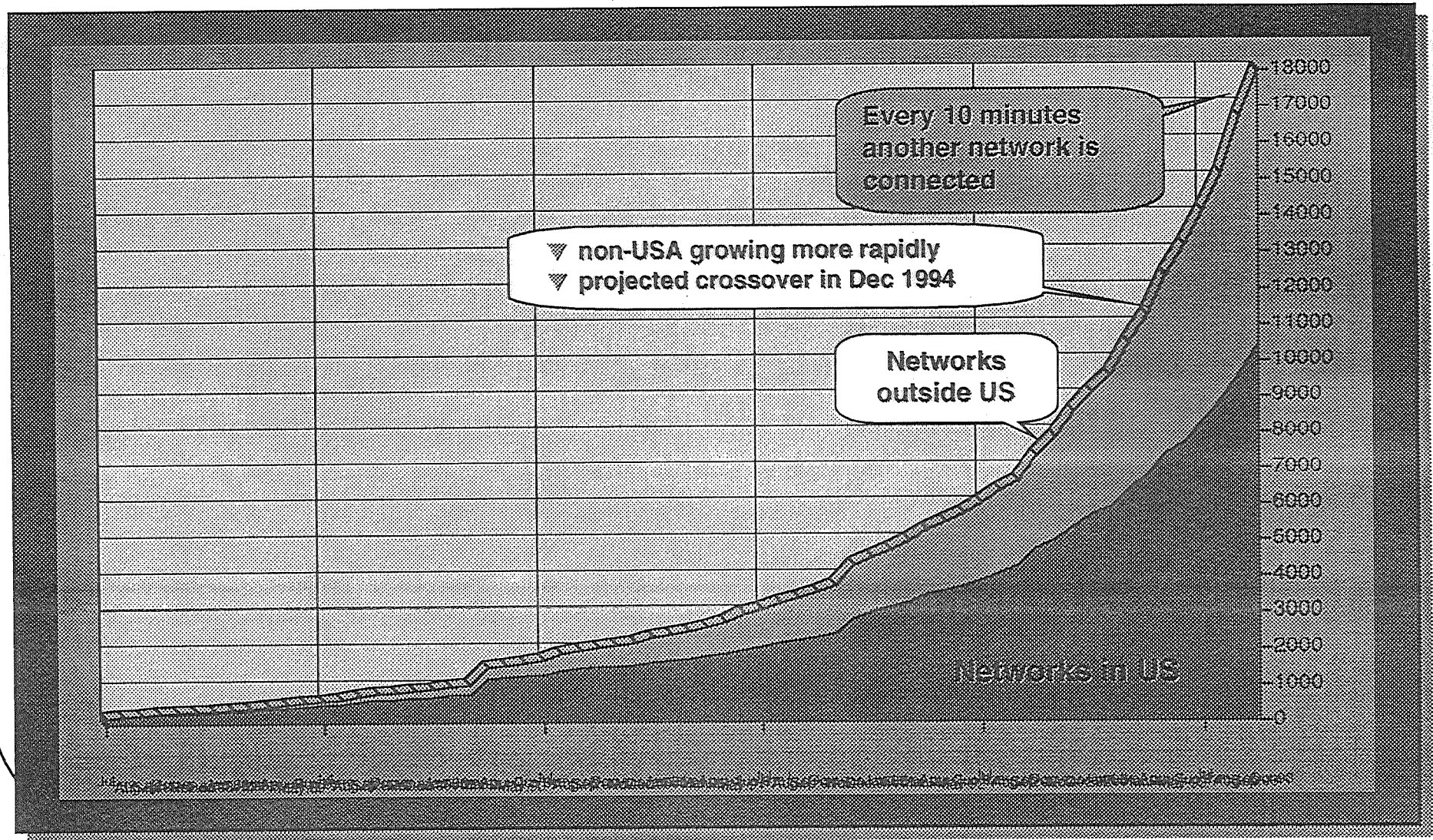
Other networks

Services and Training

March 1994

WAIS Inc.

History of Connected IP Networks: The Internet



SEARCH WINDOW

MODEL 1

Close

Size

Copy Model

Render

Copy Text

ModBrowser Testing

This is a binary test file written
by AIS Modeler. Author: Jin W.
Choi.

Text Retrieved

Downloading Finished

Close

SEARCH WINDOW



Keywords

Title

Author

Date

Grade Level

Material Type

Subjects

Abstract

Cost Category

Availability

Record Number

Language

Publisher

Specifications

Source Note

Series

Target Audience

Contents

Geographic Focus

Equipment

Notes

Standards

Evaluation

Funding

Samples

Copy Locations

Clear

Search

Databases:

ASCD-Education

ENC-CAT

ENC-FPD


ERIC-Archive

AND

Docu

Select WAIS Database(s)

Close

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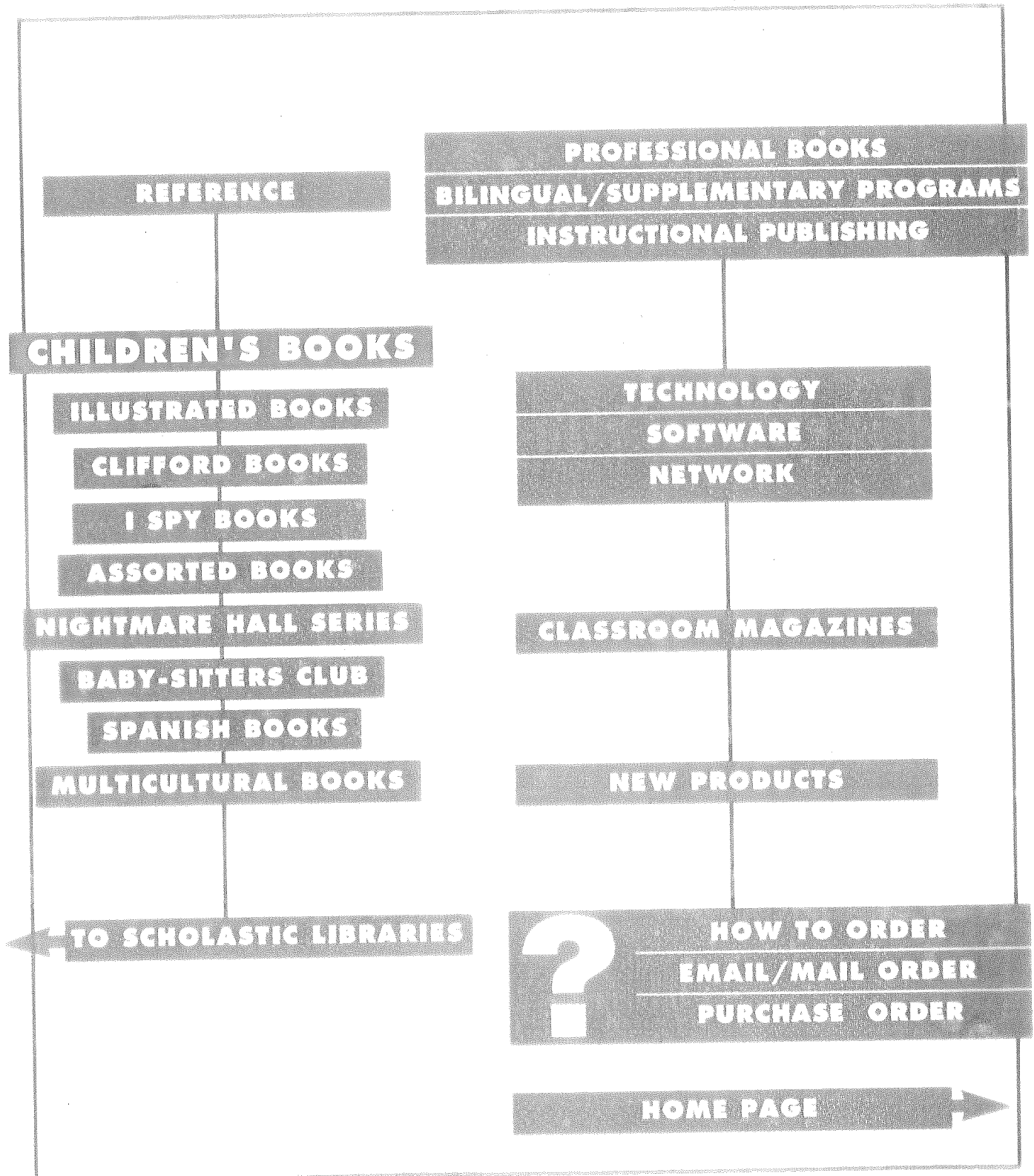
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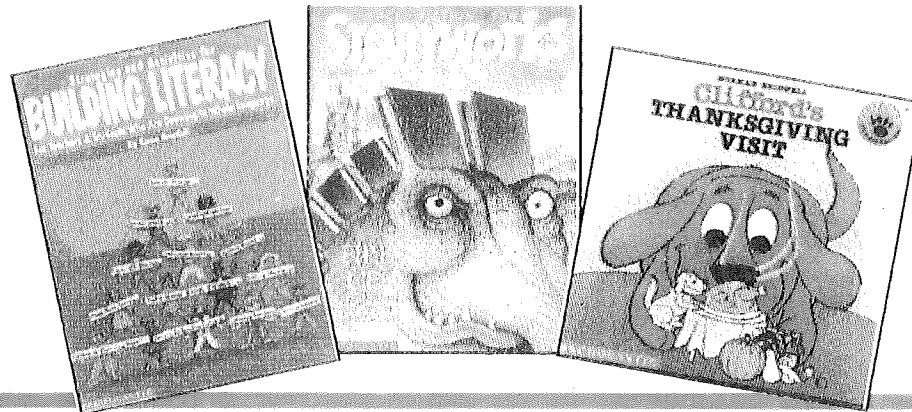
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DIRECTORY





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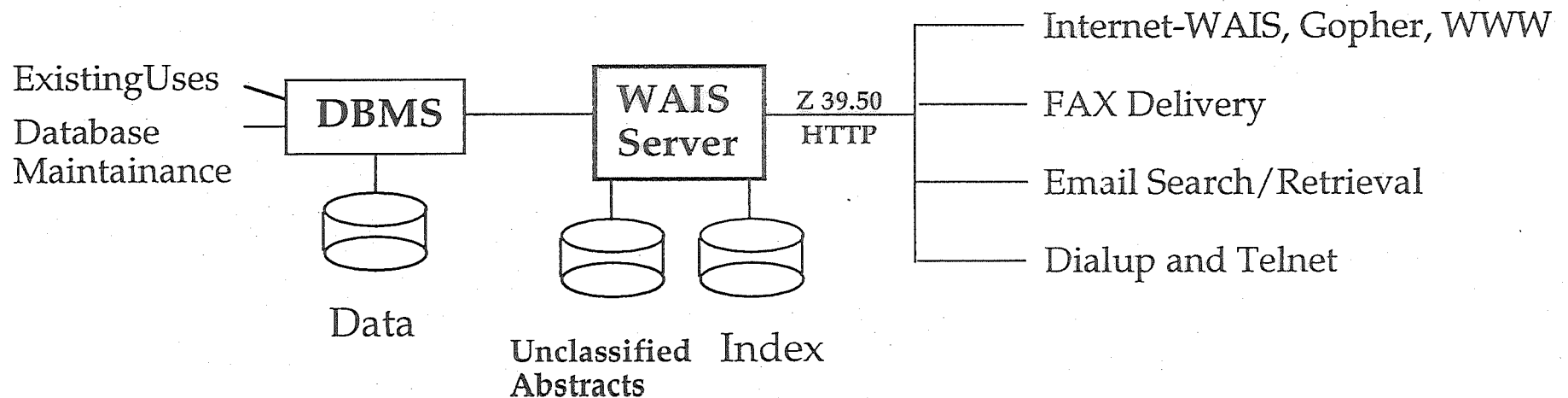
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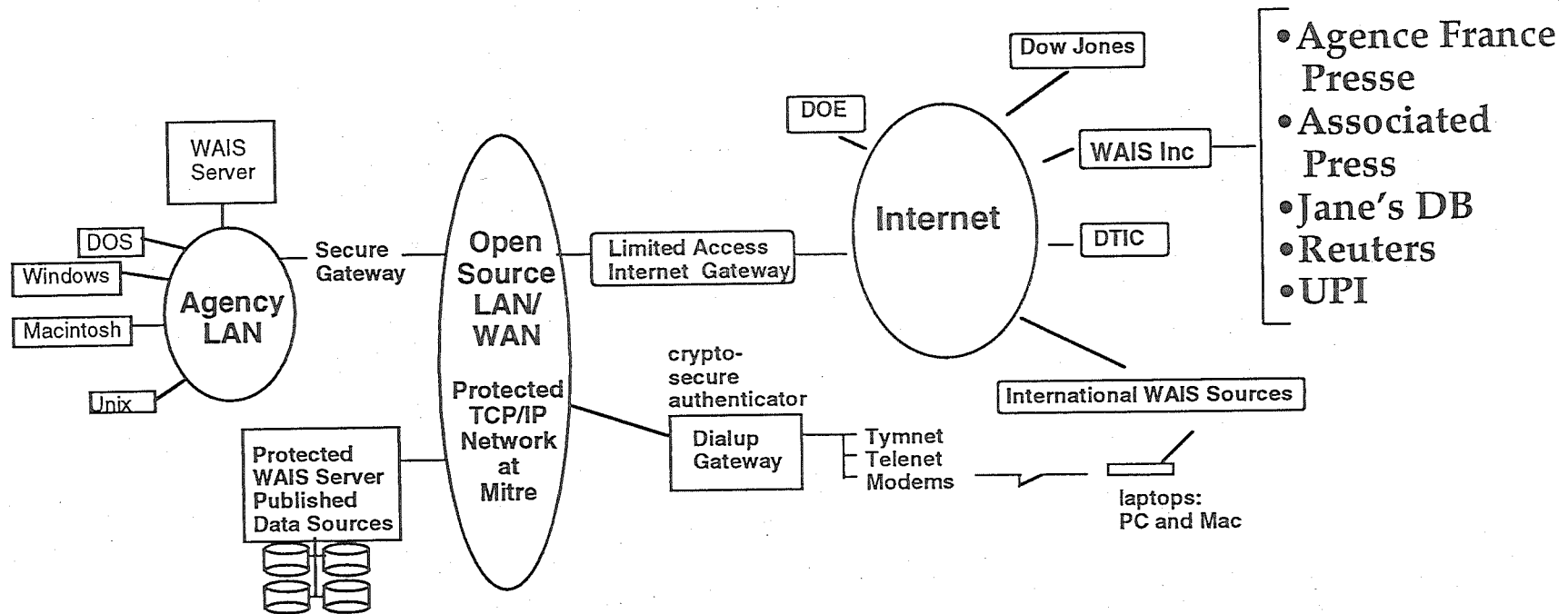
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Defense Technical Information Center on the Internet



- Project Started November 1993
- Increased access to Databases and Documents

Open Source WAIS System



- Integrating across Intelligence Organizations
- Access to published information
- Pilot system in Summer 1994

US Federal Agencies Using WAIS

The OMB Circular A-130 specifically notes: 'Emerging standards such as Wide Area Information Servers (using the NISO Z39.50 standard) will be used increasingly to facilitate dissemination of government data...''

- **NII: Government Information Locators System**
- **Department of Energy**
- **NASA**
- **US Geological Survey**
- **Intelligence (Open Source)**
- **FBI (Terror an Arson)**
- **Defense Technical Information Center (DTIC)**
- **US Department of Agriculture**
- **Environmental Protection Agency**
- **Securities and Exchange Commission (soon)**

Some WAIS Systems

WAIS Inc Markets and Partners

- Large Corporations
 - Fujitsu, Intel
 - Perot Systems, Mitre
- Publishers
 - Dow Jones, encyclopedia, Scholastic Inc
 - Sun Microsystems
- Government
 - NASA, Defense, Intelligence
 - US Government Printing Office
- Libraries
 - Library of Congress, Rice University

Wide Area Information Servers, Inc.

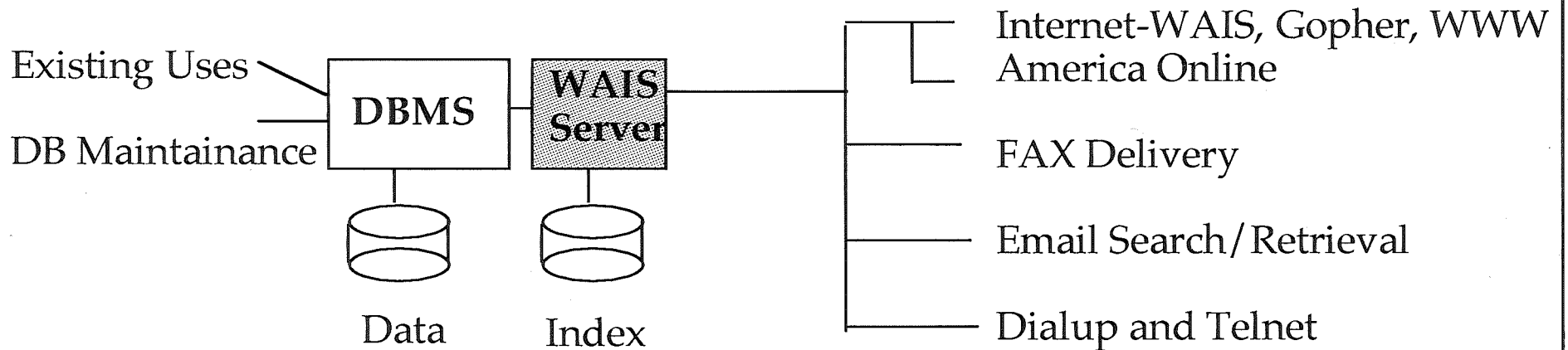
Internet Publishing

Current status

Where it is going:

- **Network Publishers: Payment systems, Authoring tools**
- **Distributed Editors: Navigation through the Muck**
- **Digital Libraries: Integrated Human Librarians**

Defense Technical Information Center WAIS System



- **Increased access to Databases and Documents**

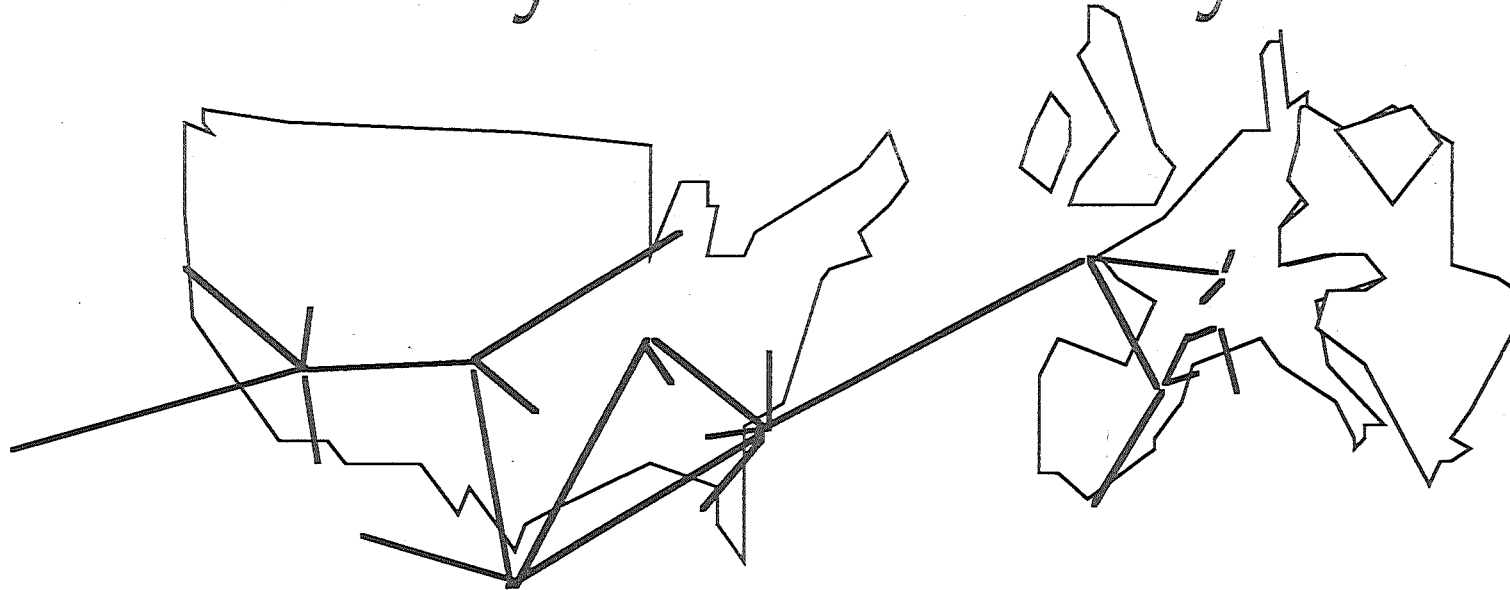
WAIS Inc.

America Online NYTimes Interface



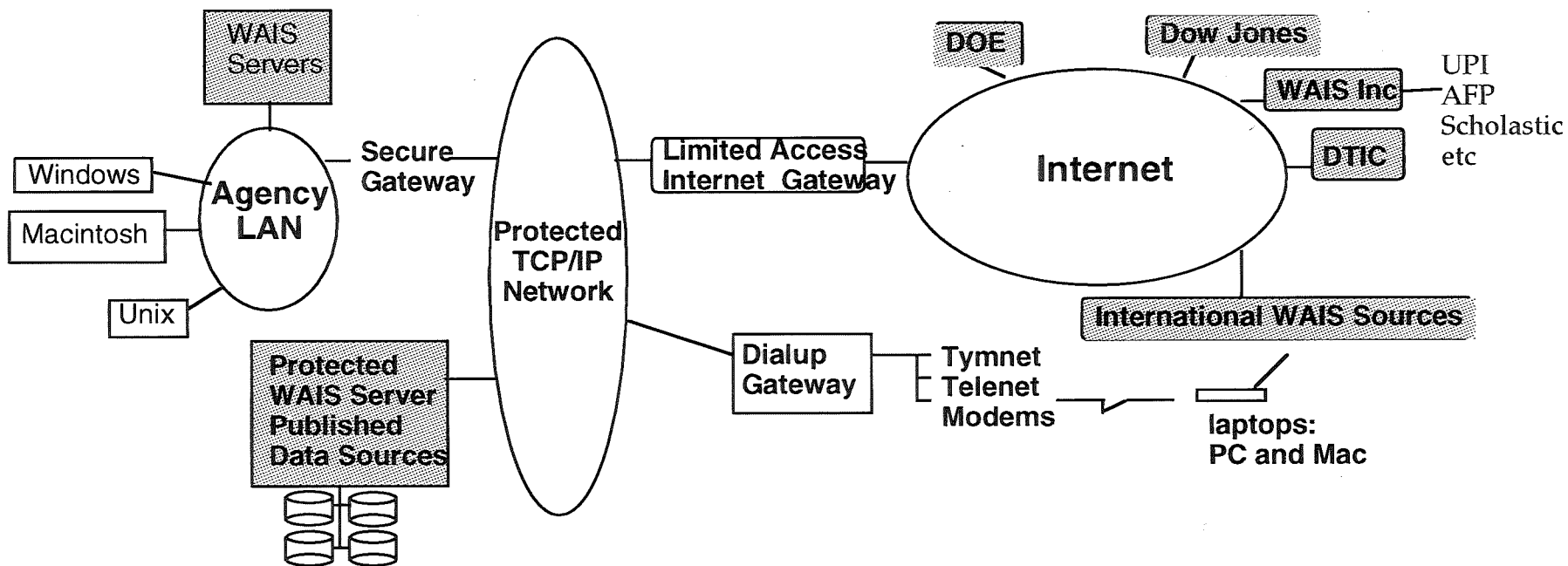
Fall '94

Perot Systems WAIS System



- **Corporate Information**
 - Resumes, Company Policies, Presentations, Contracts, Proposals, Phone book
- **Published Info**
 - CDROM's, Internet resources

US Intelligence Agencies Open Source WAIS System





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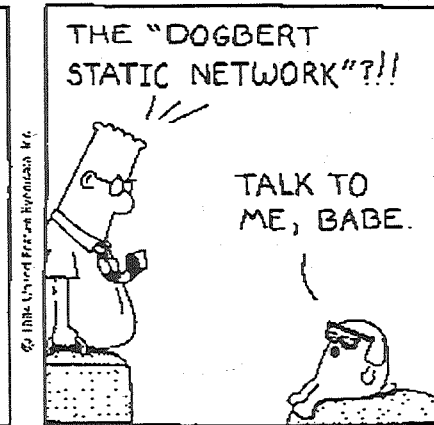
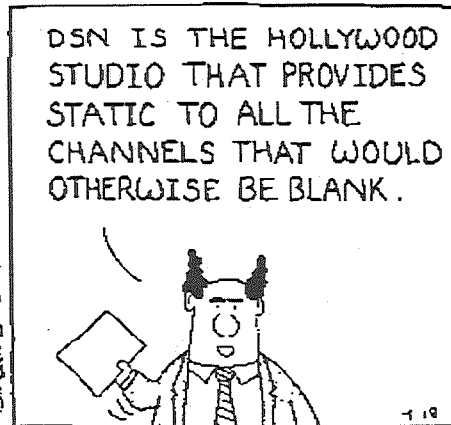
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The Wall Street Journal - Highlights

THE WALL STREET JOURNAL HIGHLIGHTS

"Personal Edition" From Ensemble

Friday, April 15, 1994

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PERSONAL INDEX

Auto Browser
Personal Path

Front Page

Car-Killer Potholes Have a New Enemy This Year:
Roboplop --- The Vehicle Scans and Fills The Most
Pesky Craters -- When It Actually Works

Divided Lobby: Chamber of Commerce Is Roiled by a
Revolt Within Rank and File --- Stands Taken in
Washington On Issues Such as Health Irk Some
Smaller Firms --- No. 2 Official Gets the Ax

Making Inroads: Japan's Imports Rise, And U.S.
Companies Are Gaining New Sales --- The Strong
Yen and a Surge In Competitiveness Pry Open the
Market a Bit --- Bargain Beer and Cheap PCs

Washington Wire: A Weekly Report From The Wall
Street Journal's Capital Bureau

What's News -- Business and Finance

Corrections...

The Wall Street Journal™...

NYT 04-20-94 - Highlights

The New York Times

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Wednesday, April 20, 1994

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Living Arts

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Lifestyles
Reviews
Science & Technology
Sports



Personal Index



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About The New York Times

News Briefs

BUSINESS NEWS AT A GLANCE

PEOPLE BRIEFS: ROBERT F. KENNEDY JR. IS REMARRIED

NATIONAL NEWS BRIEFS FROM THE NEW YORK TIMES

ADVERTISING BRIEFS FROM THE NEW YORK TIMES

FINANCIAL BRIEFS FROM THE NEW YORK TIMES NEWS SERVICE

WORLD NEWS BRIEFS FROM THE NEW YORK TIMES

Network Publishers: Sun Microsystems

- Combined use of Network Tools to Stay in Touch with Customers
- Email Lists to 10,000 users
- Archive Downloads of 12,000/day
- Press Releases, Bug Fixes, Etc

WAIS: Tools And Services for Network Publishers

- **Info@wais.com**
- **<http://www.wais.com/>**
- **415-617-0444 FAX 415-327-6513**

Today: Network Books

- Network Books: Gopher/WWW/WAIS
- Scholastic Online
- Encyclopaedia Britannica Online
- Wall St Journal/ New York Times
- Government printing office
- AppleSearch/Adobe Acrobat for Schools

WAIS Inc.

Internet Publishing: Wide Area Information Servers

Brewster Kahle
President
Wide Area Information Servers, Inc
March 1994

March 1994

WAIS Inc: Network Publishing

- **Founded June 1992 from 1990 Consortium of Apple / Thinking Machines / DowJones / KPMG**
- **Technology: 2 Founders from Supercomputing**
- **Internet: Experience in Building an Internet System**
- **Publishing: 2 Founders from Publishing**

WAIS Inc: Tools and Services for those that Publish on Networks

- **Tools for the Technically Proficient**
 - Server Software for \$15k for Unix
- **Services and Tools**
 - Partnering for complete solutions
 - Publishers keep their Identity

Network Publishing Benefits vs. Traditional Online Services

- One service has access to multiple markets
 - AOL, Delphi Internet gateways
 - LAN distribution
 - Cable systems
 - International markets
- Publisher sets their own terms
- Publisher gets greater % of revenue

Network Publishing Benefits vs. CD ROM

- Continuous updates
- No 600 meg size limits
- Interact with other distributed services
- No pre-consumption cost of printing and distributing
- Publisher keeps usage statistics

Internet Applications

- Games
- Electronic Data Interchange (EDI)
- Shopping and Commerce
- Raw transport (X.25 replacement)
- Publishing

WAIS Inc.

Wide Area Information Servers™

Publishing Systems and Services

Brewster Kahle,
President
Wide Area Information Servers, Inc
Digital Media
September 12, 1994

WAIS Inc.

Encyclopaedia Britannica Interface on WWW

Fall '94

WAIS Inc.

Some WAIS Systems

Fall '94

Document Title: DowVision on the Internet

Document URL: http://www.wais.com/dv/html_pages/dv.html



DowVISION

Welcome to **DowVision on the Internet** (pre-alpha). Please send any suggestions to dowvision-comments@dowvision.wais.net. Your comments are particularly important at this early stage of development. The service is projected to become commercially available in the third quarter of 1994.

DowVision on the Internet is a new product brought to you by Dow Jones in collaboration with WAIS incorporated. The service will include the full text of The Wall Street Journal, The New York Times News Service (current day only), Dow Jones New Service, Dow Jones International New Services, Japan Economic Newswire, Canada Newswire, Business Wire, FR Newswire, Investext Abstracts and Professional Investor Report. What you are seeing is a prototype system. The service is projected to become commercially available in the third quarter of 1994.

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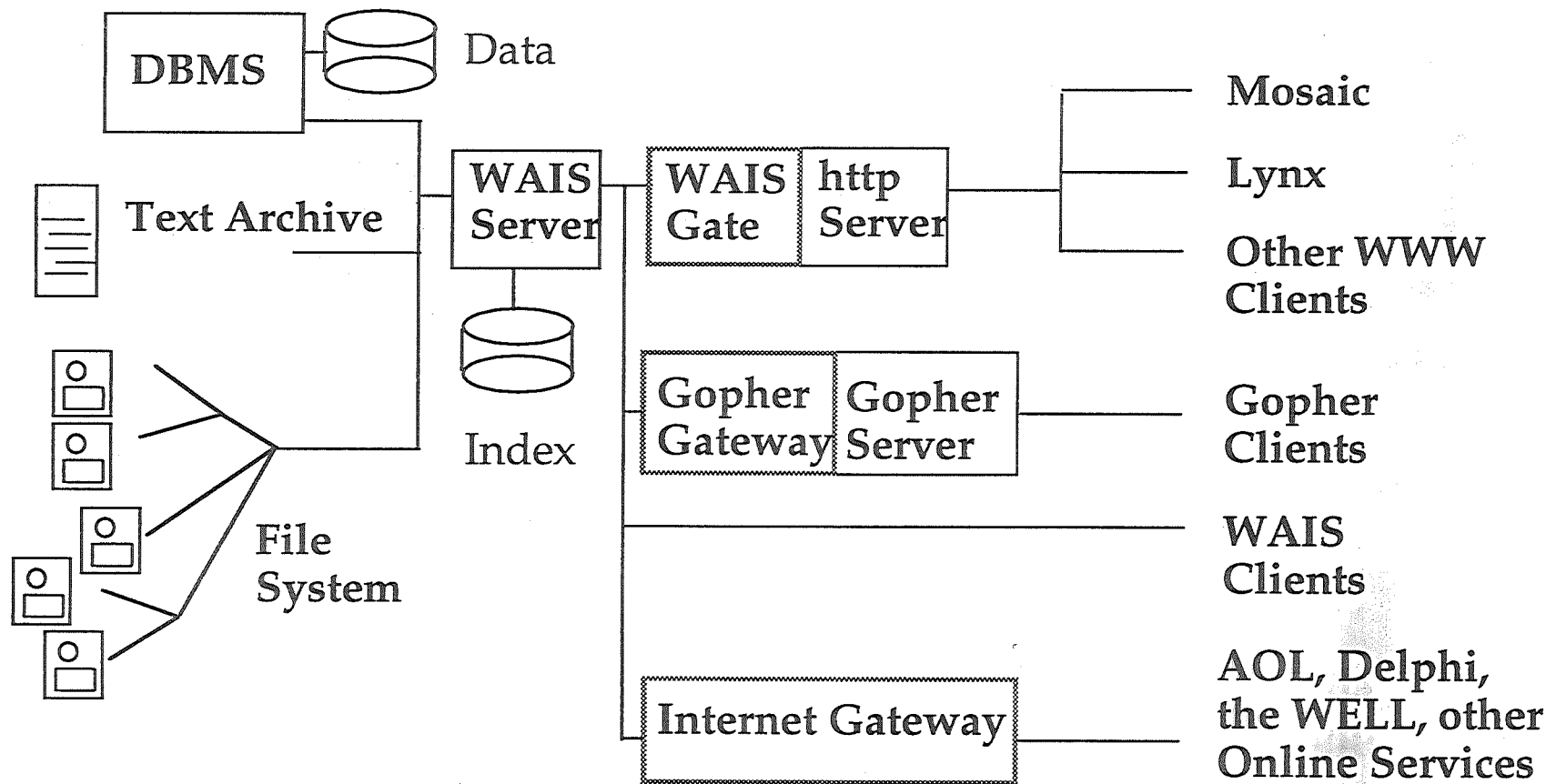
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WAIS Inc Markets and Partners

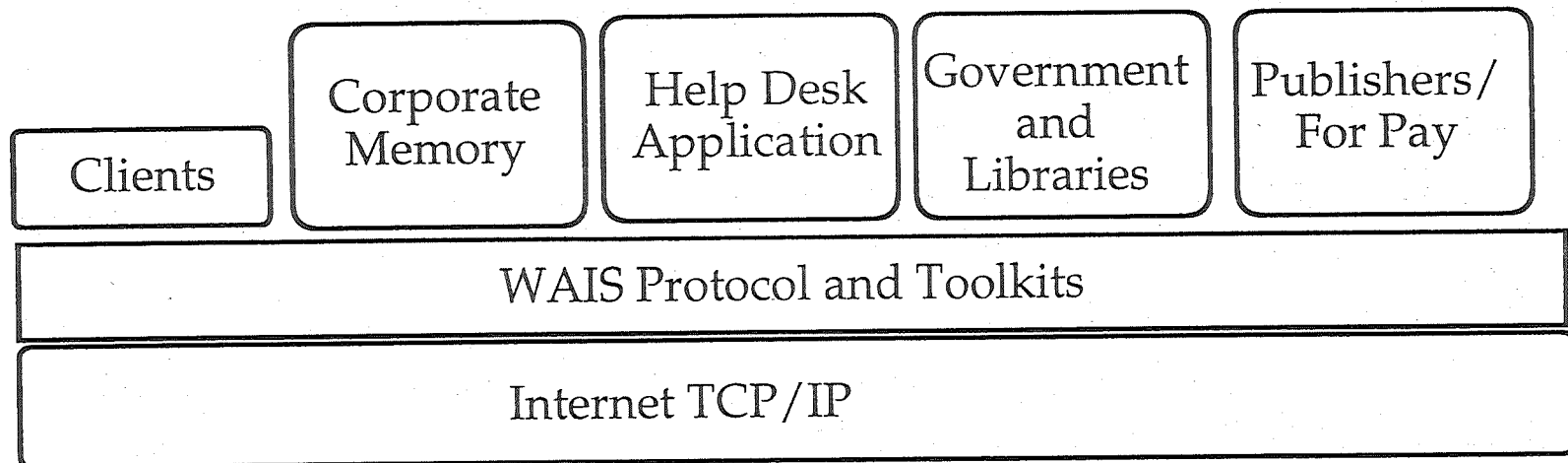
- Large Corporations
 - Fujitsu, Intel, Sun Microsystems, Novell
- Publishers
 - Dow Jones, Encyclopaedia Britannica, Scholastic Inc, WestLAW
- Government
 - NASA, Defense, Intelligence, GPO
- Libraries
 - Library of Congress, Rice University

Where WAIS Server Fits



WAIS Inc. Position


- WAIS Inc. Brings:
 - Application Protocols
 - Database Server Technology
 - Wide Area Network Expertise
- Work with Industry Partners



Future Directions

- **Servers: Integrate Gopher, Web, and WAIS Capabilities**
- **Protocols: Working on Standards Committees and Protocol Toolkits**
- **Online Services: Service Bureau of Publishers**

EINet Galaxy



←

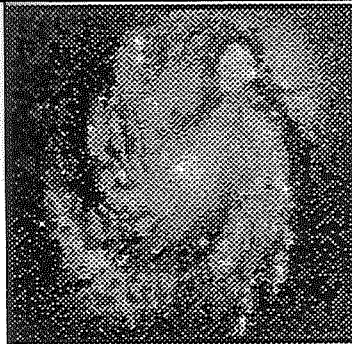
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WAIS Inc. Position

- WAIS Inc. Technology
 - Database Server Technology
 - Wide Area Network Expertise
 - Application Protocols
- WAIS Inc Services: Complete Solution

